

## **Safety Attribute Inspection (SAI) Data Collection Tool**

### **6.2.1 Maintenance Duty Time Limitations (AW)**

#### ***ELEMENT SUMMARY INFORMATION***

**Purpose of This Element** (Certificate Holder's responsibility):

- To ensure the Certificate Holder's manual contains policies, instructions and information that maintenance personnel do not exceed duty time limitations.

**Objective** (FAA oversight responsibility):

- To determine if the Certificate Holder's Maintenance Duty Time Limitations process meets all applicable requirements of the Federal Aviation Regulations and FAA policies.
- To determine if the Certificate Holder's Maintenance Duty Time Limitations process incorporates the System Safety Attributes.
- To identify any shortfalls in the Certificate Holder's Maintenance Duty Time Limitations process.

#### ***SUPPLEMENTAL INFORMATION***

**Specific Regulatory Requirement(s) (SRRs):**

- SRRs:
  - 121.135(a)(1)
  - 121.135(b)(1)
  - 121.135(b)(2)
  - 121.135(b)(3)
  - 121.377

**Related CFR(s) & FAA Policy/Guidance:**

- Related CFRs:
  - Intentionally left blank
- FAA Policy/Guidance:
  - FSAW 95-13

**SAI SECTION 1 – PROCEDURES ATTRIBUTE**

**Objective:** Procedures, instructions and information contained in Certificate Holder's manual are documented methods for accomplishing a process. Policies contained in the Certificate Holder's manual should establish the Certificate Holder's compliance posture. Policies may not be stand-alone statements but may be imbedded within procedures, instructions or information regarding a particular regulatory requirement. The questions in this section of the data collection tool are designed to assist the inspector in determining if the Certificate Holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated who, what, when, where and how type questions. This section of the data collection tool contains policy questions, procedural questions and instructional or informational questions pertaining to various types of Certificate Holder requirements such as actions, prohibitions or resources (i.e., personnel, facilities, equipment, technical data, etc.).

**Tasks**

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the information listed in the Supplemental Information section of this data collection tool.
- 2 Review the duties and responsibilities for management and other personnel identified by the Certificate Holder who accomplish the Maintenance Duty Time Limitations process.
- 3 Review the Certificate Holder's manual to ensure that it contains policies, procedures, instructions and information necessary for the Maintenance Duty Time Limitations process.

**Questions**

To meet this objective, the inspector must answer the following questions:

1. Does the Certificate Holder's manual content meet the specific regulatory and FAA policy requirements for a Maintenance Duty Time Limitations process:
  - 1.1 Does the Certificate Holder's manual contain general policies for the Maintenance Duty Time Limitations process that comply with the specific regulatory requirements?  
SRRs: 121.135(b)(1); 121.377
 

☐ Yes  
☐ No, Explain
  - 1.2 Does the Certificate Holder's manual cite the regulatory requirements listed in the Supplemental Information section of this SAI?  
SRRs: 121.135(b)(3)  
Related CFRs: Intentionally left blank
 

☐ Yes  
☐ No, Explain
  - 1.3 Does the Certificate Holder's manual contain the duties and responsibilities for personnel who will accomplish the Maintenance Duty Time Limitations process?  
SRRs: 121.135(b)(2)
 

☐ Yes  
☐ No, Explain
  - 1.4 Does the Certificate Holder's manual include instructions and information for personnel to meet the requirements of the Maintenance Duty Time Limitations process?  
SRRs: 121.135(a)(1)
 

☐ Yes  
☐ No, Explain
  - 1.5 Does the Certificate Holder's manual include instructions and information necessary to relieve each person performing maintenance or preventative maintenance within the United States for a period of at least:  
SRRs: 121.135(a)(1); 121.377

<p>1.5.1 24 consecutive hours during any seven consecutive days? SRRs: 121.377</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> <li>• Check that the certificate holder specifies how it shall relieve each person performing maintenance or preventative within the United States from duty for a period of at least 24 consecutive hours during any seven consecutive days.</li> </ul> <p><i>Sources:</i> 121.377 <i>Interfaces:</i> 1.3.14–aw; 1.3.7–aw; 4.2.1–aw; 6.1.1–op; 7.1.1–aw</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.5.2 Or the equivalent within any one calendar month? SRRs: 121.377</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> <li>• Check that the certificate holder specifies when an equivalent program will be used within the United States if the carrier does not follow the 24 consecutive hour within 7 consecutive days rest program.</li> </ul> <p><i>Sources:</i> 121.377 <i>Interfaces:</i> 1.3.14–aw; 1.3.7–aw; 4.2.1–aw; 6.1.1–op; 7.1.1–aw</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6 Does the Certificate Holder's manual include instructions and information requiring that any person performing maintenance or preventive maintenance functions for it within the United States is relieved from duty for a period of at least: SRRs: 121.135(a)(1); 121.377</p>	
<p>1.6.1 24 consecutive hours during any seven consecutive days? SRRs: 121.377</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> <li>• Check that the certificate holder specifies how it shall relieve each person performing maintenance or preventative within the United States from duty for a period of at least 24 consecutive hours during any seven consecutive days.</li> </ul> <p><i>Sources:</i> 121.377 <i>Interfaces:</i> 1.3.14–aw; 1.3.7–aw; 4.2.1–aw; 6.1.1–op; 7.1.1–aw</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.2 Or the equivalent thereof within any one calendar month? SRRs: 121.377</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7 Does the Certificate Holder's Maintenance Duty Time Limitations process comply with the guidance contained in FAA Flight Standards Handbook Bulletin FSAW 95–13?</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> <li>• Check that the certificate holder specifies how they will surveill contract maintenance organizations within the United States to ensure that those organizations are complying with 121.377.</li> </ul> <p><i>Sources:</i> FSAW 95–13 paragraph 3 <i>Interfaces:</i> 1.3.11–aw; 1.3.7–aw; 7.1.1–aw</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.8 If alternate procedures exist for use during irregular conditions, do the alternate procedures provide an equivalent level of safety to achieve the same results as the primary procedures?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable

<b>SAI SECTION 1 – PROCEDURES ATTRIBUTE</b> <b>–Drop Down Menu</b>	
1. No procedures, policy, instructions or information specified.	
2. Procedures or instructions and information do not identify (who, what, when, where, how).	
3. Procedures, policy or instructions and information do not comply with CFR.	
4. Procedures, policy or instructions and information do not comply with FAA policy and guidance.	
5. Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.).	
6. Procedures, policy or instructions and information unclear or incomplete.	
7. Documentation quality (e.g., unreadable or illegible).	
8. Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM – Flight Operations Manual to GMM – General Maintenance Manual, etc.).	
9. Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).	
10. Resource requirements incomplete (personnel, facilities, equipment, technical data).	
11. Other.	

**SAI SECTION 2 – CONTROLS ATTRIBUTE**

**Objective:** Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the data collection tool are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures or instructions and information will be complied with.

Controls may be in the form of "administrative controls" which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to the associated who, what, when, where and how type questions. Controls may also be in the form of "engineered controls" such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).

**Tasks**

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the control questions below.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the controls that it has documented.

**Questions**

To meet this objective, the inspector must answer the following questions:

2. Are the following controls built into the Maintenance Duty Time Limitations process:
 

2.1 Is there a control in place to ensure that the Certificate Holder relieves the mechanics from duty in accordance with their policies, instructions and information?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.2 Is there a control in place to ensure that the Certificate Holder maintains and utilizes work schedules to track maintenance personnel duty time?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.3 Does the Certificate Holder have a documented method for assessing the impact of any changes made to the controls in the Maintenance Duty Time Limitations process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<b><i>SAI SECTION 2 – CONTROLS ATTRIBUTE –Drop Down Menu</i></b>
1. No controls specified.
2. Documentation for the controls do not identify (who, what, when, where, how).
3. Controls incomplete.
4. Controls could be circumvented.
5. Controls could be unenforceable.
6. Resource requirements incomplete (personnel, facilities, equipment, technical data).
7. Other.

**SAI SECTION 3 – PROCESS MEASUREMENT ATTRIBUTE**

**Objective:** Process measurements are used by the Certificate Holder to measure and assess its processes to identify and correct problems or potential problems and to make improvements to the processes. The questions in this section of the data collection tool are designed to assist the inspector in determining if the Certificate Holder measures or assesses information to identify, analyze and document potential problems with the process. Process measurements are basically a Certificate Holder's internal evaluation or auditing of the most important policies, procedures or instructions and information associated with an element.

To prevent the duplication of work that would otherwise occur, Process Measurements are most commonly addressed through a combination of auditing features contained in both the Certificate Holder's Safety Program/Internal Evaluation Program (for Operations and Cabin Safety related issues) and the auditing function of the Continuous Analysis & Surveillance System (for Airworthiness or Maintenance/Inspection related issues). The Director of Safety and the Quality Assurance Department often work in conjunction to accomplish this function for the Certificate Holder. This approach simply requires amendment of the Safety Program/Internal Evaluation Program audit forms or checklists and the Continuous Analysis & Surveillance System audit forms or checklists to include the specific process measurements for each element.

**Tasks**

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the process measurement questions below.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the process measurements that it has documented.

**Questions**

To meet this objective, the inspector must answer the following questions:

3. Does the Certificate Holder's Maintenance Duty Time Limitations process include the following process measurements:
 

3.1 Process measurements that would reveal when the Certificate Holder failed to relieve maintenance personnel from duty in accordance with their Maintenance Duty Time policies and procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.2 Process measurements that would reveal when the Certificate Holder failed to maintain and utilize work schedules to track maintenance personnel duty time in accordance with its Maintenance Duty Time policies and procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.3 Does the Certificate Holder document its process measurement methods and results?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.4 Does the organization that conducts the process measurements have direct access to the person with responsibility for the Maintenance Duty Time Limitations process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<b>SAI SECTION 3 – PROCESS MEASUREMENT ATTRIBUTE</b> <b>–Drop Down Menu</b>	
1. No process measurements specified.	
2. Documentation for the process measurements does not identify (who, what, when, where, how).	
3. Inability to identify negative findings.	
4. No provisions for implementing corrective actions.	
5. Ineffective follow-up to determine effectiveness of corrective actions.	
6. Resources requirements (personnel, facilities, equipment, technical data).	
7. Other.	



**SAI SECTION 4 – INTERFACES ATTRIBUTE**

**Objective:** Interfaces are used by the Certificate Holder to identify and manage the interactions between processes. The questions in this section of the data collection tool are designed to assist the inspector in determining whether or not interactions between the procedures, policies or instructions and information associated with other independent processes within the Certificate Holder's organization are documented. Written procedures, policies or instructions and information that are interrelated and located in different manuals within the Certificate Holder's manual system need to be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the Certificate Holder's manual system.

**Tasks**

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the interfaces associated with the Maintenance Duty Time Limitations process that have been identified along with the individual questions in the Procedures Section (1) of this data collection tool.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the interfaces that it has documented.

**Questions**

To meet this objective, the inspector must answer the following questions:

NOTE: ALL EXPLANATIONS IN THE DROP DOWN MENU FOR "NO" ANSWERS MUST INCLUDE THE INDIVIDUAL QUESTION NUMBER FROM THE PROCEDURES SECTION (1) OF THIS DATA COLLECTION TOOL AND THE ELEMENT NUMBER(S) OF THE INTERFACE(S) THAT WERE NOT ADDRESSED.

4. Does the Certificate Holder's manual:

- |  |  |
|--|--|
| 4.1 Properly address the interfaces that are identified along with the individual questions in the Procedures Section (1)?                       | <input type="checkbox"/> Yes<br><input type="checkbox"/> No, Explain |
| 4.2 Document a method for assessing the impact of any changes to the associated interfaces within the Maintenance Duty Time Limitations process? | <input type="checkbox"/> Yes<br><input type="checkbox"/> No, Explain |
| 4.3 List additional interfaces identified during the accomplishment of this SAI.   |  |

<b><i>SAI SECTION 4 – INTERFACES ATTRIBUTE –Drop Down Menu</i></b>
1. No interfaces specified.
2. The following interfaces not identified within the Certificate Holder's manual system:
3. Interfaces listed are inaccurate.
4. Specific location of interfaces not identified within the manual system.
5. Other

## SAI SECTION 5 – MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE

**Objective:** The questions in this section of the data collection tool address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified and knowledgeable person who is responsible for the process, is answerable for the quality of the process and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

### Tasks

To meet this objective, the inspector must accomplish the following tasks:

- 1 Identify the person who has overall responsibility for the Maintenance Duty Time Limitations process.
- 2 Identify the person who has overall authority for the Maintenance Duty Time Limitations process.
- 3 Review the duties and responsibilities of the person(s), documented in the Certificate Holder's manual.
- 4 Review the appropriate organizational chart.

### Questions

To meet this objective, the inspector must answer the following questions:

5. Are the following aspects of the Management Responsibility and Authority Attributes addressed in the Maintenance Duty Time Limitations process:
 

5.1 Does the Certificate Holder's manual clearly identify who is responsible for the quality of the Maintenance Duty Time Limitations process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.2 Does the Certificate Holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions and information for the Maintenance Duty Time Limitations process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.3 Does the Certificate Holder's manual include the duties and responsibilities of those who manage the work required by the Maintenance Duty Time Limitations process? SRRs: 121.135(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.4 Does the Certificate Holder's manual include instructions and information for those who manage the work required by the Maintenance Duty Time Limitations process? SRRs: 121.135(a)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.5 Does the Certificate Holder's manual clearly and completely document the authority for this position?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.6 Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having responsibility for the Maintenance Duty Time Limitations process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.7 Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having authority to establish and modify the Certificate Holder's policies, procedures, instructions and information for the Maintenance Duty Time Limitations process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.8 Does the Certificate Holder's manual clearly and completely document the procedures for delegation of authority for the Maintenance Duty Time	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

Limitations process?	
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<b><i>SAI SECTION 5 – MANAGEMENT RESPONSIBILITY &amp; AUTHORITY ATTRIBUTE –Drop Down Menu</i></b>
1. Not documented.
2. Documentation unclear.
3. Documentation incomplete.
4. Other.